



eSIM Issuance & Portability Technology Overview



eSIMs (Embedded Subscriber Identity Modules) are digital SIMs that allow users to activate a telecom carrier's cellular plan without needing to obtain a physical SIM card. eSIMs are soldered directly to a board inside the user's device and (unlike traditional SIM cards) can store multiple operator profiles on a single module.

With the migration to eSIMs, telecom customer onboarding processes can become fully remote—removing the inconvenience of having to visit a physical store. But with this added convenience comes a new set of challenges for telecoms, who typically use the in-person issuance of a physical SIM card as an opportunity to collect and verify personal identity and address documents.

As a result of the shift to eSIMs, telecoms will need to re-engineer critical business and logistics processes, including remote identity verification. In this overview, we'll show you how to embrace the convenience of eSIMs while cutting costs and strengthening your identity security, too.

Solving the eSIM Customer Identity Challenge

As more device manufacturers, such as Apple, switch to eSIMs (the iPhone 14 series only supports dual-eSIM in the US; other countries' support of eSIMs may vary by model), telecom carriers are faced with two obstacles.

First, they must effectively integrate their remote Identity verification solution with their eSIM subscription management solution. Second, they must make certain this integrated process can accurately tie the issuance of an eSIM to a real customer's identity in order to stop potential fraud at the source.

To solve the first challenge, Daon's remote identity verification web application (IdentityX®) works out of the box, with little integration effort needed, and can be fully customized to match the requirements of any telecom business. To solve the second challenge, IdentityX combines robust document authentication with certified facial liveness biometrics, which can be consumed and stored by the business immediately following a successful verification.

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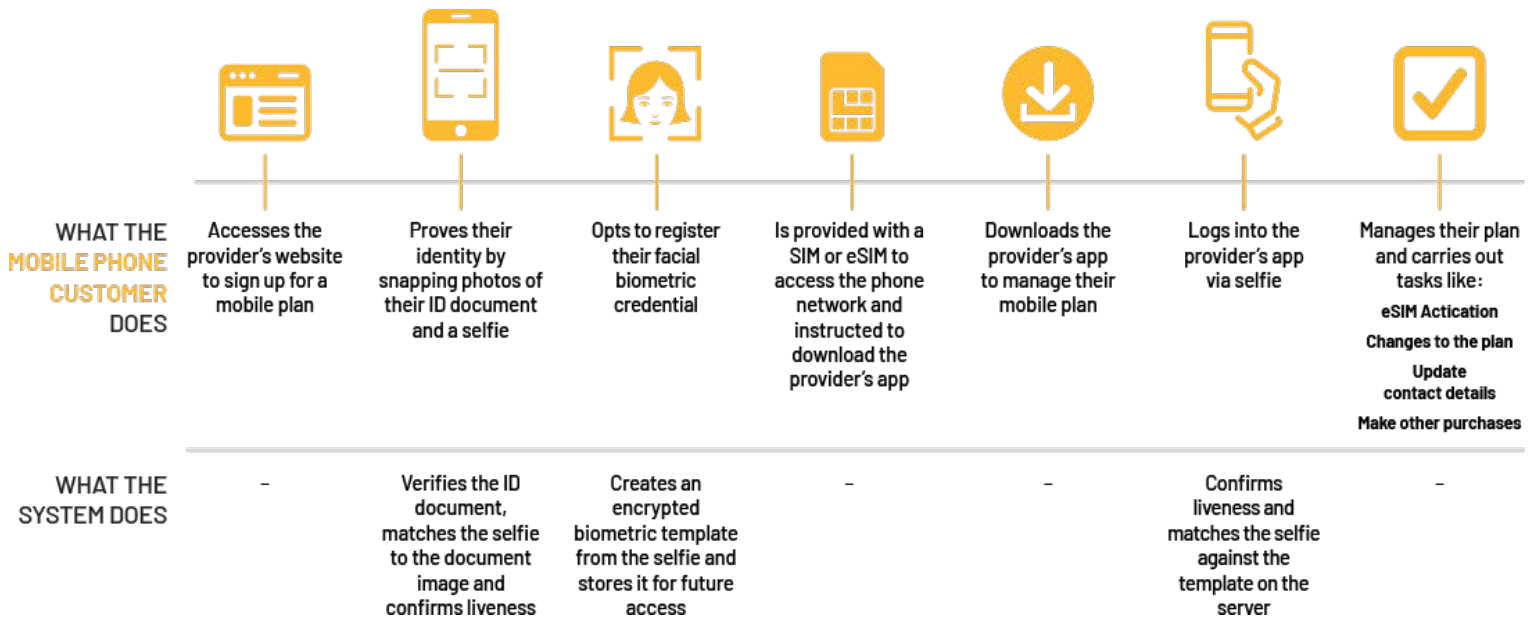
Building a Faster, Safer User Journey

To protect customers and telecom providers both, a highly secure, reliable process for establishing a new user's identity is essential. At the same time, this process must be as fast, convenient, and frictionless as possible.

Here's how it works in a nutshell:

1. The customer purchases an eSIM-enabled mobile device from a telecom provider's website.
2. During the purchasing process, the customer is seamlessly connected to Daon's IdentityX web application to complete an identity verification.
3. The customer captures and uploads images of their government-issued identity document and a selfie.
4. The identity document is authenticated, and the selfie is matched to the document image and checked for any signs of spoofing with a photo or video recording.
5. The customer is returned, seamlessly, to the telecom provider's purchasing flow.
6. The telecom provider securely stores the customer's data for audit purposes, but does not hold on to any biometric data—only encrypted biometric templates, which cannot be reverse-engineered.

Here's how a worldwide telecom provider designed their remote identity verification process, powered by Daon's IdentityX, for both traditional SIMs and eSIMs.



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